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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,321	10/29/2003	Steven Ochs	2003-053-TAP	6542
51344	7590	12/07/2006	EXAMINER	
BROOKS KUSHMAN P.C. / STK			OLSON, JASON C	
1000 TOWN CENTER, TWENTY-SECOND FLOOR			ART UNIT	PAPER NUMBER
SOUTHFIELD, MI 48075-1238			2627	

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/696,321	OCHS ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Jason C. Olson	2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 September 2006.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 29 September 2006 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Drawings***

The replacement sheet submitted on 9/29/2006 is accepted by the examiner.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites the limitation "the tape drive" in the last line. There is insufficient antecedent basis for this limitation in the claim. The examiner recommends that the limitation "the tape drive" be replaced with "the tape drive tray".

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6, 9, 11-17, 20, and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Carlson et al. (US PUB 2004/0056568), hereafter "Carlson".

Regarding claim 1, Carlson teaches at least one tape drive tray (see para. [0038] and figures 3-7, the elevator 100 is a tape drive tray); an intelligence module stationary within the at least one tape drive tray (see para. [0040] and figures 6-7; item 140 is a stationary intelligence module), said intelligence module having electronics to control and monitor tape drive tray functions in the storage library (see para. [0040], para. [0047], ln. 7-11 and figure 9, the elevator control 142 controls and monitors the tape drive tray); and a main library controller interfaced to the intelligence module (see figure 9, the library system controller 150 is interfaced with the intelligence module containing the elevator controller 142), wherein the intelligence module sends tape drive tray function data to the main library controller (see para. [0048]).

Regarding claim 2, Carlson teaches the intelligence module interface includes a tape transport interface port (see para. [0039]-[0040] and figures 5-7, the intelligence module 140 is interfaced with the transport bin 130 of elevator 100).

Regarding claims 3 and 4, Carlson teaches the tape drive tray function data is sent via a wireless connection and the wireless connection includes at least one a radio frequency or infrared transmission (see para. [0041]).

Regarding claim 5, Carlson teaches wherein the main library controller transmits commands to be performed on the tape drive tray by the intelligence module (see para. [0047]).

Regarding claim 6, Carlson teaches positive or negative acknowledgment of the commands is sent back to the main library controller after the commands are received by the

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intelligence module (see para. [0048], to provide necessary communication positive or negative acknowledgement of the commands is sent back to the library controller).

Regarding claim 9, Carlson teaches the tape drive tray includes at least one of a tape drive, a power supply, a fan, a temperature sensor, and a fault indicator light, each interfaced to the intelligence module (see figure 9; the elevator controller 142 contained in the intelligence module is interfaced with a power supply 160 and 162).

Regarding claim 11, Carlson teaches the tape drive tray function data is gathered by periodically sampling status signals from the tape drive tray (see para. [0040]; the tape drive tray samples cartridge information such as the bar codes).

Regarding claims 12-17, 20, and 22: method claims 12-17, 20, and 22 are drawn to the method of using the corresponding apparatus claimed in claims 1-6, 9, and 11. Therefore method claims 12-17, 20, and 22 correspond to apparatus claims 1-6, 9, and 11 and are rejected for the same reasons of anticipation as used above.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 10, 18, 19, 21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carlson in view of Armagost et al. (US PUB 2005/0057847), hereafter “Armagost”.

Regarding claims 7, 8, and 10, Carlson teaches that the library controller and the intelligence module transmits commands and function information back and forth, but fails to teach the commands are transmitted in a serial format; the intelligence module decodes the serially formatted command into discrete signals corresponding to a specific tape drive tray interface; and the functional information is sent back in a serial format. However, Armagost is relied upon to teach transmitting commands in a serial format, decoding the commands and transmitting functional information back in serial format (see para. [0322] and figure 51D; the communication between the magazine drive connector 1514 (which receives commands from the library controller) and the drive 1602 is done through a serial to parallel converter 1598 (decoder); the drive together with the converter constitute and intelligence module). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the communication between the library controller and the intelligence module of Carlson by applying the teaching of communicating data in a serial format as taught by Armagost for the purpose of reduce the number of pads associated with the drive connector as described by Armagost in paragraph [0322], lines 1-6.

Regarding claims 18, 19, and 20: method claims 18, 19, and 20 are drawn to the method of using the corresponding apparatus claimed in claims 7, 8, and 10. Therefore method claims 18, 19, and 20 correspond to apparatus claims 7, 8, and 10 and are rejected for the same reasons of obviousness as used above.

Regarding claims 23 and 25, Carlson teaches transmitting data from a tape drive tray to a main library controller, (see para. [0048]), comprising: periodically sampling status information generated from devices within the tape drive tray; and sending the status information to main

library controller (see para. [0040]; the tape drive tray samples cartridge information such as the bar codes); transmitting control data to the tape drive tray (see para. [0047]); receiving the control data at the tape drive tray (see para. [0048]); and using the stationary intelligence module to drive discrete signal lines to a state as specified in the control data (see para. [0047]). Carlson fails to teach that the commands are transmitted in a serial format; the stationary intelligence module decodes the serially formatted command; and the functional information is sent back in a serial format. However, Armagost is relied upon to teach transmitting commands in a serial format, decoding the commands and transmitting functional information back in serial format (see para. [0322] and figure 51D; the communication between the magazine drive connector 1514 (which receives commands from the library controller) and the drive 1602 is done through a serial to parallel converter 1598 (decoder); the drive together with the converter constitute an intelligence module). It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the communication between the library controller and the intelligence module of Carlson by applying the teaching of communicating data in a serial format as taught by Armagost for the purpose as stated above.

Regarding claim 24, the combination of Carlson and Armagost teaches generating status information including at least one of a tape drive, a power supply, a fan, a temperature sensor, and a fault indicator light (see para. [0048] and figure 9 of Carlson; the elevator controller 142 contained in the intelligence module is interfaced with a power supply 160 and 162).

***Response to Arguments***

Applicant's arguments filed 9/29/2006 have been fully considered but they are not persuasive. The applicant argues "The Carlson application, however, fails to disclose a stationary intelligence module". The examiner disagrees because the intelligence module (fig. 6, item 140) is stationary with regards to the tape drive tray (fig. 6, item 100). It is true that the tape drive tray 100 moves, but the intelligence module 140 is fixed to the tape drive tray 100, thus it is stationary with respect to the tape drive tray 100 as recited in claims 1, 12, 23, and 25. The applicant further states, "The controller 140 is not stationary within the storage modules". This argument may be correct, but this limitation is not positively recited in claims. Claims 1-6, 9, 11-17, 20, and 22 stand rejected under 35 U.S.C. 102(e) as being anticipated by the Carlson application and claims 7, 8, 10, 18, 19, 21, and 23-25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the Carlson application and the Armagost application.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason C. Olson whose telephone number is (571)272-7560. The examiner can normally be reached on Monday thru Thursday 7:30-5:30; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea L. Wellington can be reached on (571)272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JCO  
November 30, 2006



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